

IN THE CLAIMS

1-6. (Canceled)

7. (Previously presented) A vehicle comprising:

two or more wheels, and

at least one electric motor, where each at least one electric motor includes an in-wheel motor with a motor control scheme that can be dynamically adapted to user inputs, machine operating conditions and machine operating parameters to form an adapted control scheme.

8-9. (Canceled)

10. (Previously presented) A method comprising:

providing a vehicle having:

two or more wheels, and

at least one electric motor, where each at least one electric motor includes an in-wheel motor with a motor control scheme that can be dynamically adapted to user inputs, machine operating conditions and machine operating parameters to form an adapted control scheme.

11. (New) The vehicle of claim 7, the vehicle being a hybrid electric vehicle.

12. (New) The vehicle of claim 11, the hybrid electric vehicle being a series hybrid electric vehicle.

13. (New) The vehicle of claim 12, the vehicle having at least four wheels.

14. (New) The vehicle of claim 7, the vehicle having at least four wheels.

15. (New) The vehicle of claim 14, at least one wheel of the at least four wheels disposed at a corner of the vehicle.

16. (New) The vehicle of claim 7, the at least one electric motor operatively connected to the two or more wheels, the two or more wheels disposed at a front or a rear of the vehicle.

17. (New) The vehicle of claim 7, each wheel operatively connected to one of the at least one electric motor.

18. (New) The vehicle of claim 7, each of the at least one electric motor connected to a battery.

19. (New) The vehicle of claim 18, the battery electrically connected to a generator.

20. (New) The vehicle of claim 19, the generator disposed in the vehicle.
21. (New) The vehicle of claim 7, each of the at least one electric motor connected to a battery adjacent to each electric motor.
22. (New) The vehicle of claim 21, each battery electrically connected to a generator.
23. (New) The vehicle of claim 22, the generator disposed in the vehicle.
24. (New) The vehicle of claim 7, the vehicle further comprising a controller, the at least one electric motor operatively connected to the controller.
25. (New) The vehicle of claim 7, the vehicle further comprising a user interface, the user interface operatively connected to the controller.
26. (New) A hybrid electric vehicle, comprising:
 - a vehicle body;
 - at least two wheels disposed on the vehicle body;
 - at least one electric motor operatively connected to each wheel; and
 - a controller operatively connected to the at least one electric motor and to receive sensor information concerning at least one of a user input, a machine operating condition, and a machine operating parameters,the controller controlling the at least one electric motor according to a first motor control scheme and a second motor control scheme, the controller changing control between the first motor control scheme and the second motor control scheme in response to at least the sensor information.
27. (New) The hybrid electric vehicle of claim 26, the hybrid electric vehicle being a series hybrid electric vehicle.
28. (New) The hybrid electric vehicle of claim 26, the vehicle having at least four wheels.
29. (New) The hybrid electric vehicle of claim 26, at least one wheel of the at least two wheels disposed at a corner of the vehicle.
30. (New) The hybrid electric vehicle of claim 26, the at least two wheels disposed at a front or a rear of the vehicle.
31. (New) The hybrid electric vehicle of claim 26, each of the at least one electric motor connected to a battery.

32. (New) The hybrid electric vehicle of claim 31, the battery electrically connected to a generator.

33. (New) The hybrid electric vehicle of claim 32, the generator disposed in the vehicle.

34. (New) The hybrid electric vehicle of claim 26, each of the at least one electric motor connected to a battery adjacent to each electric motor.

35. (New) The hybrid electric vehicle of claim 34, each battery electrically connected to a generator.

36. (New) The hybrid electric vehicle of claim 35, the generator disposed in the vehicle.

37. (New) The hybrid electric vehicle of claim 27, the vehicle further comprising a user interface, the user interface operatively connected to the controller.

38. (New) A method comprising:
providing power to at least two wheels of a hybrid electric vehicle with at least one electric motor operatively connected to the at least two wheels;
controlling the at least one electric motor with a first motor control scheme;
sensing information from at least one of a user input, a machine operating condition, and a machine operating parameter;
forming a second motor control scheme in response to the sensed information; and
controlling the at least one electric motor with the second motor control scheme.